	Ft.	In.
Length from end muzzle to end tail	6	73
of carapace		
Width of plastron at middle		

Note on Dioicœus forms of VITIS VINIFERA, L.

BY THOMAS MEEHAN.

The different species of Vitis are so closely allied that the systematist is often puzzled to find distinguishing characters, and hence liable to give too much

importance to points really of little value.

De Candolle, in his Prodromus, divides Vitis into two sections, according to the inflorescence,—one, natives of this country, with imperfect flower (Dioice aut polygame, Americane); the other, perfect and Old-world forms (Hermaphrodita, in orbe veteri indigene), - but as Vitis is not of a true declinous type, but of that class which suppresses or develops its sexual organs according to circumstances, such a division is at best of doubtful value.

Vitis vinifera, the great type of Asiatic forms, has not probably been observed closely in a natural state; and under cultivation, in the hands of cultivators who value the vine for its fruit only, barren plants would not likely be preserved. Yet pistillate or female plants do not seem uncommon, for De Candolle says (vol. i. p. 633,) "Seminibus numero variis imo interdum omnibus abortivis," these seedless grapes being most likely the product of unimpreg-

nated ovaries.

That male plants do exist is, however, proved by a specimen, in the Acade-

my's Herbarium, of *Vitis vinifera mascula*, gathered near Naples by Tenore.

In the endeavor to distinguish forms of *Vitis vinifera* from American species, its hermaphrodite character is still often insisted on; but with the demonstration of the existence certainly of male flowers, and the probable existence of female ones, this distinction becomes too uncertain to be of much value.

Descriptions of new species of Texan MYRIAPODA.

BY DR. HORATIO C. WOOD, JR.

Genus CERMATIA.

C. Linceci.

C. dilute brunnea, linea mediana saturate viride et alteris lateralibus interdum obsoletis ornata; stomatis dorsalibus singula maculis duis laete rubris

marginata.

This handsome species is of a brownish color, with the dark green median stripe often involving nearly the whole of the posterior portion of the dorsum. The lateral stripes appear to be sometimes wanting. The head is marked much as in C. forceps; in the dried specimen it is of a nearly uniform reddish ferruginous color. The scuta are roughened with rather distant small spines; their margins are thin, elevated, without conspicuous spines. The antennæ are of the same color as the head, as indeed are all of its appendages. The spots bordering the dorsal stomata are somewhat kidney-shaped, and of a scarlet lake eolor.

The under surface of the body, the coxe and femora, are of a light brown color. The tibiæ and tarsi are of a dark greenish tint. The metatarsi are of nearly the same tint as the head; the first article is about equal to the next five in length. The sterna are rather deeply impressed with a median longitudinal line. The body of the largest specimen in my possession is about seven lines in length.

The foregoing description is taken chiefly from dried specimens, in which the coloration, I presume, does not differ materially from that of life.

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Dr. Liucecum states, in his letter accompanying the specimens, that their favorite haunts are under stones, in hollow logs, and especially about unused fire-places. He also says that they are not half the size of *O. forceps*. In dedicating this species to Dr. Lincecum, I do it as a well merited token of respect for his untiring zeal as a field naturalist, and for the liberality with which he furnishes others with the results of his own industry. I am indebted to the Doctor for all the species described in this paper.

Genus POLYDESMUS.

P. IMPURUS.

P. dilute brunueus fusco variatus; scutis rubro marginatis; scuto anale triangulare, apice elongato truncato; appendicibus masculis, robustis, spina

terminale haud pilosa.

The color is a light brown, finely mottled with dark brown, the dark color predominating in the central portions of the scuta, the light on the lateral parts. The scuta are ornamented with a narrow reddish flesh-colored line both on their posterior and lateral margius, which is, however, more pronounced on the lateral margins; the first scutum has a similar liue on its anterior margin. The vertex has a strongly pronounced median line. The antenna are filiform, somewhat pilose, and like the ventral surface and pubescent feet, a light yellowish brown. The male appendages are robust, their blunt distal end is covered with long hairs, and gives origin to two spines, neither of which are hairy; the larger of these is regularly curved, except at its extreme point, where it is abruptly bent; the other is slender, curved, and acute. The total length of the body and head is about an inch.

This species is closely allied to *P. hispidipes*, differing from it, however, in coloring and in the form of the genital appendages. I have not examined any females. Dr. Lincecum informs me that it is rare in Texas, especially in dry seasons, and is found chiefly under old cow dung. Its favorite haunts suggested

its name, although it is one of our handsomest species.

Genus IULUS.

I. CÆSIUS.

I. cæsius, brunneo annulatus; antennis filiformibus, modicis, pilosis; capitis vertice subnigra, superficie antica dilute brunnea, margine antico modice emarginato; scutorum lateribus canaliculatis; mucrone modice magno, recto,

robusto; segmentis 56, haud pilosis.

The color of this species is a sort of bluish gray, more or less involved in the brown rings. The antennæ are slender, and not at all clavate. The sides are chased with moderately close channels, which on the anterior scuta are strongly pronounced, but on the posterior are somewhat obsolete. The last scutum is prolonged into a somewhat blunt mucro, at least the latter is quite obtuse in the only specimen which I have seen. The male genital appendages are composed, as in the allied species, of two parts. The chief of these gives origin on the outer part on each side to a process, which is bifurcated almost to its base; the arms which thus originate are separated by a narrow fissure, one of them is thin, broad, and distally narrowed to a point; it is so placed as to present its broad aspect somewhat obliquely towards the flank of the animal. The other is shorter, clavate, distally coarsely profusely pilose, and set as it were at an angle to the first, so as to face obliquely backwards. The inner portion of the male appendages consists on each side of two slender, subcylindrical, smooth processes, which are united at their bases; the shortest of them is nearly straight, the longer somewhat bent. The total length of my specimen is nearly two inches.

I. DIVERSIFRONS.

I. saturate brunneus, linea nigra mediana et seriebus lateralibus maculæ nigræ ornatus; capitis vertice subnigra, superficie antica cinerea, margine antico distincte emarginato; mucrone modice magno, recto; segmentis 52.

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The antennæ of this species are filiform and pubescent. The male genital appendages are composed on each side of two parts, the outer of which is broad, thin, and very irregular, euding in two processes, of which the outer is short, very strongly expanded distally and pilose, and often of a black color; the inner is longer and more irregular, narrowing from the base, distally it is bent nearly at right angles to itself, ending in cylindrical points. The inner of the two parts is composed of a single irregular, thin process, which has at first somewhat of the swan-neck curve, and near its eud is bent sharply at right angles to itself; it gives origin to two sharp spines, one arising from the angle and the other from the shaft, so as to be, as it were, shielded by the bent portion. The female appendages are similar to those of *I. impressus*, differing, however, in the shape of the lower plates on each side, which give more the appearance of a volute shell than of a bivalve. The total length of the head and body is about two inches.

This is a species of which I received a single specimen in a large collection from South Illinois, and mentioned under I. impressus in my monograph.

It appears to be rare in the Western States, but very plenty in Texas.

On two New Minerals from Chester Co., Penn. BY ISAAC LEA.

On a visit last summer to the well knowu Corundum locality near Unionville, Chester Co., my attentiou was attracted to an adhering fibrous mass, on the side of a large piece of Corundum on the farm of Mr. John Lesley, Jr. This was evideutly different from any mineral accompanying Corundum which I had ever seeu; and the application of my chisel showed at once that it had no outward characteristic of that exceedingly hard mineral. On the contrary, the edge of the instrument easily penetrated it, but at the same time it was tough and adhered so closely to the side of the mass of Corundum that it was with great difficulty I got quite a large piece off without breaking it up. Subsequently I took my friend Mr. Jefferis to the spot, and we obtained the remaining portion. On the careful examination of other masses of Corundum in possession of Mr. Lesley we could find no more of it. We found, however, pieces of a soft mineral which had a lamellar structure, and which I think will prove to be the same substance when they shall both be analysed. Believing that these are varieties of the same mineral, and that it has heretofore not been observed, I propose to call it Lesleyite, after the proprietor of the farm where it was found.

On some of the masses of Corundum we found very fine large lamellar crystals of Emerylite, some of the cleavage laminæ of which were one to two inches long and more than an inch broad. Some of these crystals exhibited well defined hexagonal prismatic sides. I believe no such fine specimens of Emerylite have been found elsewhere. In a few cases there were beautifully decremented crystals. In some of the cleavage plates may be observed irregular red spots, which under the microscope are transparent and of a bright color, but they present no regular crystalline form and are, no doubt, composed of one of the oxides of iron. When thin laminæ were subjected to the polaroscope the red

color was unusually brilliant.

Connected with these crystals of *Emerylite* and passing into and through them, are dark green hexagonal, translucent *Tourmalines*, in prisms often an inch long, some of them being one-tenth of an inch thick. There is also much

black Tourmaline connected with the Corundum.

The most important and rarest mineral of this locality is, however, Diaspore (Dihidrate of Alumina.) This I found in connexion with the large cleavage plates of Emerylite which surrounded the crystals of Diaspore, imbedding them in the mass. Some of the Diaspore was in lamellated masses of two to three inches and often of adamantine brilliancy. Some of the crystals of Diaspore are of a pure opaque white, while others are of a fawn color inclining to topaz

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